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Community Risk Assessment for the City of Ozark

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### Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of
others is set forth, quotation marks so indicate, and that appropriate credit is given where I have
used the language, ideas, expressions, or writings of another.

#### Abstract

The success of any organization is directly related to effective planning of that organization. Without effective planning an organization will be unable to function at its optimum. A community risk assessment for an entity should be considered a vital part of that planning process. The problem was Ozark Fire Department does not have a comprehensive community risk assessment for the City of Ozark. The purpose of this descriptive research project was to identify the issues for the City of Ozark's comprehensive risk assessment plan that will meet the industry standard, provide relevant information, and meet the needs of the City of Ozark. This was accomplished by answering the following research questions: (a) what methods are available to accomplish a community risk assessment? (b) what information is needed for a community risk assessment? (c) what are the potential risks that could adversely affect the City of Ozark? (d) how will the City of Ozark and OFD benefit from a community risk assessment? The research questions were answered through a thorough literature review, a questionnaire, and two interviews. The research revealed many valuable aspects of the risk assessment. Due to the potential enhancement of safety for personnel and citizens, it should be considered a necessity for all fire service organizations. It was recommended that the organization establish a committee to oversee the establishment and design of the program. This committee should utilize the framework established by NFPA 1600 in the design of the program. The organization must be willing to support the completion of this program with adequate resources. Once the program is established it must be exercised, evaluated, improved, and updated frequently. Adequate training will be a key factor in the success of the program.

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#### Community Risk Assessment for the City of Ozark

#### Introduction

Planning is considered a vital function of many organizations. Emergency planning and preparation performed prior to an event helps communities respond, mitigate, and recover in the event of an actual incident. Loss reduction requires both a proactive and reactive approach, and the foundation of the proactive approach requires the fire service to know what hazards and risks the community can be exposed to (Stowell, 2007). All communities no matter the size have the potential to be overwhelmed during a catastrophic event (Shouldis, 2010, p. 71). Adequate community planning allows for the identification and enhancement of internal deficiencies by providing a system to acquire external resources (Shouldis). It is impossible to eliminate all hazards and risks, but it is possible to plan in order to respond and mitigate the events. A community risk assessment is a vital link in the preparation, training, equipping, and financial justification of a community and fire service organization.

Where "the pre-incident plan should be the foundation for the decision making process during an emergency situation" (National Fire Protection Association, 2010, p. 15), a thorough community risk assessment should be the foundation for departmental planning, training, expansion, and resource allocation. A vital part of the fire service mission, as related in many textbooks used within the fire service, is "to protect lives and property" (Coleman, 2008, p. 2) and the success of this mission can be influenced through thorough risk assessment within the community.

The problem was the Ozark Fire Department (OFD) does not a have a comprehensive risk assessment for the City of Ozark. Adequate preparation is required for successful response

and effective mitigation of fires. Similar preparation and planning is required for disaster planning and response to widespread emergencies (Carter & Rausch, 1999). Recent tornados in many states including Alabama led to widespread destruction. Many homes, businesses, industrial facilities, and critical infrastructure were damaged or destroyed. A comprehensive risk assessment would have addressed and identified prevention and mitigation strategies, and information for development of response, continuity, and recovery plans (National Fire Protection Association [NFPA], 2010). Failing to complete this planning for potential large scale emergencies could lead to disastrous results.

The primary purpose of this descriptive research was to identify the issues for the City of Ozark's comprehensive risk assessment plan that will meet the industry standard, provide relevant information, and meet the needs of the City of Ozark. This applied research project was accomplished with a thorough literature review, a questionnaire and two interviews.

The following questions were answered through the research process: (a) what methods are available to accomplish a community risk assessment? (b) what information is needed for a community risk assessment? (c) what are the potential risks that could adversely affect the City of Ozark? (d) how will the City of Ozark and OFD benefit from a community risk assessment?

Background and Significance

The City of Ozark is primarily a bedroom community located in the county seat of Dale County Alabama. It encompasses thirty five square miles with a population of 16,000. Ozark Fire Department is the only career department within the county. Fully staffed we have forty nine sworn personnel, and provide fire protection and advanced life support (ALS) emergency medical service (EMS) response to citizens, consumers of local businesses, and travelers. OFD provides this protection for the city from three stations. Each station houses an ALS pumper,

with Station 3 housing a ladder company as well. The administrative offices, training office, and classroom are also located in Station 3. Fire administration of OFD includes the Fire Chief, Operations Chief, and Training Officer. The operations division of OFD consists of three twenty four hour shifts, each staffed with a captain, two lieutenants, four drivers, and eight fire-medics or firefighters.

Whether through oversight or lack of adequate resources, planning has not been a strong point of this organization for a number of years. In order to be adequately prepared to mitigate problems and risks, these risks must be identified. A community risk assessment would be the initial step in this planning process. If it is to be a success, it will require a commitment of time, resources, and finances.

Two recent events prompted this research project. The first of these events was a devastating tornado that struck a town of similar size and make up as Ozark. The tornado hit on March 1, 2007 in Enterprise Alabama. Enterprise is located only ten (10) miles west of Ozark. The path of this tornado was in direct line with Ozark, but fortunately did not touch down here. Many business, churches, and homes were devastated. The elementary school was hit, but the high school was destroyed. Seven teenagers who were students at the school lost their lives. This department as well as many others was deployed to assist with the incident. Enterprise was not prepared for this type of emergency and neither is Ozark.

The second event also prompted a review of the pre-incident planning program for the City of Ozark, and was addressed in this author's last research project. This event was a simulated school shooter at a local community college. This event not only revealed a need for more detailed and concise pre-incident plans, but also a need for a community risk assessment. This event involved multiple agencies and jurisdictions. Some of the issues and complication

found during this drill could be eliminated or diminished with adequate pre-planning and a risk assessment.

The goal of this applied research project is directly related to the following United States Fire Administration (USFA) strategic plan goals and objectives: 1) improve local planning and preparedness 2) improve the fire and emergency services' capability for response to and recovery from all hazards. It is also related to the USFA operational objective to promote within communities a comprehensive, multi-hazard risk-reduction plan led by the fire service organization.

Unit 2 of the EAFSOEM class student manual specifically relates to this research. The four objectives of this unit discuss community Critical Infrastructure and Key resource (CIKR) vulnerability assessment, community resources available to provide infrastructure protection, community resource shortfalls, and CIKR mapping (Federal Emergency Management Agency [FEMA], 2010, p. SM2-1).

#### Literature Review

Community risk assessment should be a building block in the process of community risk reduction. During the Executive Analysis of Community Risk Reduction (EACRR) course much information was processed in ways to create a safer community. Many but not all risk can be eliminated. The risks that can't be eliminated will require preparation in order to lessen the effects of the disaster. The EAFSOEM class followed with more information dealing with the preparation of these risks. The initial step is the community risk assessment.

The two weeks spent at the National Emergency Training Center (NETC) provided many opportunities for research at the Learning Resource Center (LRC). Other sources of research

information included the Alabama Virtual Library (AVL), the department library, and a selection of personal books and textbooks.

The (EACRR) course was the motivation for the promoting of community risk reduction in the community, and the (EAFSOEM) course provided the framework to build on. According to the Federal Emergency Management Agency community risk reduction is a combination of risk prevention and risk mitigation strategies. Risk prevention is the anticipation of a potential risk and the development of prevention methods, while risk mitigation is the anticipation of these risks and developing means to diminish the consequences (Federal Emergency Management Agency [FEMA], 2009).

News reports of disasters are common as these events occur on a daily basis and a fire department fills a critical role (Poulin, 2010, p. 6). All communities no matter the size have the potential of being affected by an overwhelming event (Shouldis, 2010, p. 71). The issue seems not if we will be affected, but when. Preparation is the key and many organizations and cities are not aware of the differences in the preparation for the day to day "bread and butter" operations and the large scale events (Poulin, p. 6). Community risk assessments will require commitments of time, effort, and input from the stakeholders. Community risk reduction issues must be addressed by both the political and fire department leadership (Foley, n.d.).

Past practice of risk management involved the NFPA model. The all-hazards approach to risk management and reduction developed by the National Fire Academy (NFA) better suits the needs of modern communities. This method places community risk into two categories: natural and man-made risks. Community risk is then defined by the combination of all natural and man made risk that a community could experience. A four step method is then employed to complete the community risk assessment. These steps include identification of the risk, identifying who

will be affected, identifying the cause of the risk, and prioritizing the risk. (Stowell, 2007, p. 657) Each step involves a systematic approach, comprehensive data collection and research.

Each potential risk is identified from "traditional and nontraditional" traditional sources include information found in fire investigation reports, fire inspection reports, incident records, and information from organizations such as NFPA, USFA, and the Centers for Disease Control and Prevention (CDC). "Nontraditional" sources would include information obtained from local civic clubs, insurance company information, and nongovernmental organizations (NGO) which provide services to the areas. This information is further dissected into four categories. These categories define the information of the disaster's potential effects at a neighborhood, local, state, or national level (Stowell, 2007, p. 659).

After the risk is identified, Stowell (2007) indicates that the organization must identify who in the community is at risk. As the demographics of communities change so will their potential needs. Sources for this type information can be obtained through census records, social services, and public health records.

Each potential community risk is then examined to discover the root cause. Each may have multiple potential, primary, or secondary causes, but all will have a root cause. A misinterpretation of this information could lead to failing of the prevention program (Stowell, 2007).

The last step in the process described by Stowell is to prioritize each of the identified risks within the community. These risks are prioritized based on their severity and frequency. Severity refers to the affects on human suffering, the economy, and the environment. Frequency refers to how often the community could expect to experience the disaster. This prioritization

will assist in resource allocation, and review of partnerships with other organizations that can offer assistance (Stowell, 2007)

In 1991 NFPA formed a committee to address the needs of disaster management. This committee was tasked with developing a document to address preparation for response and recovery from disasters. The resulting document was NFPA 1600, Recommended Practices for Disaster Management. This third edition of this document, released in 2007, included prevention as a vital aspect of the program and was renamed Disaster/Emergency Management and Business Continuity Programs. In this edition prevention was added to these original four concepts: mitigation, preparedness, response, and recovery (National Fire Protection Association [NFPA], 2010).

NFPA 1600 is divided into eight chapters with each chapter addressing different aspects in the development of a program. Chapter 1 deals with the scope, purpose, and application of the administration. Chapter 2 is referenced material, and chapter 3 is definitions of terms found in the standard. The information dealing with the actual development of a program starts with chapter 4 which is the administrative information for the leadership of the entity. The planning phase information is found in chapter 5, while chapter 6 deals with the implementation of the program. The guidance for testing and exercising the program is found in chapter 7, and chapter 8 addresses program improvement.

NFPA 1600 states "the entity leadership shall demonstrate commitment to the program ..." (NFPA, 2010, p. 1600-6). This commitment is vital to the success of the program. Chapter 4 of the standard deals entirely with leadership and commitment of the entity to the program. This chapter emphasizes that the entity must be prepared to provide policies, procedures, and plans for the development, implementation, and maintenance of the program. The entity must

provide the needed resources for the support of the program, and must continue to evaluate and review the program in order to keep the program on tract and correct any problems found in the program. Chapter 4 also indicates that the entity should develop a program committee and program coordinator to oversee the development of the program. It is important for the entity to ensure the program follows all applicable laws, policies, and regulations. The entity must also address the financial aspects of all areas of the program as well as address the management of all records involving the program (NFPA).

The planning portion of the standard can be found in chapter 5 of NFPA 1600. The standard indicates that the entity should follow a planning process in which "the vision, mission and goals" are defined and the "key stakeholders" are represented (NFPA, 2010, p. 1600-7). A number of common plan requirements can be found as well as the planning and design section. The requirements of following an "all hazards" approach to the risk assessment are addressed as well as ensuring the program covers all phases of the disaster management. The risk assessment section covers the types of hazards that should be assessed and how likely they are to occur. This section also identifies that the entity should perform an analysis of the effects of the identified hazards. It is also indicated that the entity should develop strategies for prevention and mitigation of the hazards (NFPA).

The last three chapters of the standard are dealing with the implementation of the program, the testing and evaluation of the program, and improving the program. Once the program is implemented it must go through periodic testing in order to find the areas of weakness. Once the weak areas are found, corrective actions must be implemented in order to maintain the effectiveness of the program.

In 2003 Homeland Security Presidential Directive-8 (HSPD-8) was issued. This directive launched national policies to "strengthen the preparedness of the United States to prevent, protect against, respond to, and recover from threatened or actual terrorist events, major disasters, and other emergencies within the United States" (Department of Homeland Security [DHS], 2007, p. 1). The *National Preparedness Guidelines* (DHS, p. 1) was released in September 2007 and defined its vision as:

"A NATION PREPARED with coordinated capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources and need."

This goal will require coordination from all levels of government, businesses, and citizens. The guidelines utilize the terminology "capabilities based-preparedness". Organizations must analyze their capabilities based on potential incidents and evaluate their ability to respond and mitigate, as well as evaluate their resources (DHS, 2007, p. 1,3).

More than one source has emphasized the importance of planning. Planning is a vital portion of many aspects, but is especially important in risk assessment or risk management. Starling states "planning is the keystone of the arch of program management, and governmental success is often synonymous with planning success" (Starling, 2005, p. 218). "Many, if not most of the operational challenges that the fire service faces during disasters can be anticipated and planned for while there is time to resolve any policy issues that would arise concerning operational procedures" (Stambaugh & Sensenig, 2008, p. 1).

As an organization plans and prepares for these devastating events, it is important to follow the "all-hazards approach" (DHS, 2007, p. 3). Many of the events organizations have dealt with in the past, such as severe weather and natural disasters, will be beneficial when

planning and preparing for the not so common events such as response to chemical, biological, and radiological emergencies (Stambaugh & Sensenig, 2008).

Ozark and the surrounding area have been adversely affected by a number of varying significant weather events. This area of the country sees many different types of weather. According to the National Oceanic and Atmospheric Association (NOAA) this area has been affected by 314 significant weather events with 180 injuries, thirteen (13) deaths, and total property damage exceeding 5 billion dollars since 1950. This includes winter weather events, excessive heat, floods, straight line winds, tornados, and tropical systems. Since 2000, there have been almost 200 significant weather events with 51 injuries, two (2) deaths, and property damage exceeding 18 billion dollars (National Oceanic and Atmospheric Administration [NOAA], 2011).

In summary, organizations must have foresight and attempt to plan for these potential devastating events prior to the event. Organizations must follow the "all-hazard" (DHS, 2007, p. 3) approach. This method forces the organizations to plan for all potential incidents. By following this method, organizations must review their logistical support, capabilities of their personnel, and cooperative agreements with other like agencies as well as the private sector. Any deficiencies should be addressed at this time. Each organization or entity will have the responsibility to develop and provide the necessary policies, procedures, and format for compiling and producing the documents.

#### **Procedures**

The problem statement was reviewed to ensure it met the requirements for this applied research project. This applied research project was accomplished utilizing the descriptive research methodology to determine: a) what methods are available to accomplish a community

risk assessment?, b) what information is needed for a community risk assessment?, c) what are the potential risk that could adversely affect the City of Ozark?, d) how will the City of Ozark, and the Ozark Fire Department benefit from a community risk assessment? The primary purpose of this applied research project was to reveal the benefits of the risk assessment, and the most efficient method of performing the risk assessment.

The research questions pertaining to this research were answered through a thorough literature review, interviews, and collecting data from a questionnaire distributed to the line officers of OFD.

#### Questionnaires

The information discovered during the research of published information led to the development of a questionnaire (Appendix A) distributed to the line officers of OFD. Eight line officers (lieutenants and captains) were issued the questionnaire with included instructions regarding the completion and return method. Each of these was completed and returned. The information was also used to develop a list of questions which were utilized for two informal interviews. The first interview was with Gearld Minor. Mr. Minor is an Environmental, Safety, and Health (EHS) consultant with Aerotek Incorporated, Environmental Division. He is currently working on a risk management plan at Bell Helicopter, which is a subsidiary of Textron Industries, in Ozark. The second interview took place with Robert Marsh. Mr. Marsh is a certified emergency manager, and currently serves as the Emergency Management Agency (EMA) Director for Dale County.

Limitations noted during the research were minimal. The small number of line officers allowed for only a small response group. The internal questionnaire was issued to the line officers and completed while on duty. Response to calls, a disinterest in the subject, as well as

personal subjectivity could have influenced the responses. The potential for subjectivity also existed in the interview with the local EMA Director.

#### Results

The descriptive research methodology was employed to identify potential risks, benefits of a risk assessment, and methods to facilitate a risk assessment. Although much of the reviewed literature referenced risk assessment methods that are no longer utilized, some of the information found in these outdated methods could still be incorporated in a risk assessment. The literature review did produce the necessary information needed to complete a risk assessment that would meet the needs of the City of Ozark.

The answer to the research questions: What methods are available to accomplish a community risk assessment?, and what information is needed for a community risk assessment?, came primarily from the literature review and were answered by the same source. Much of the review literature referenced outdated methods. The most current information was found in NFPA 1600 (2010). It is all-encompassing in all phases of the process, and is considered the industry accepted standard for all hazard risk assessment. Chapter four (4) of the standard provides the background information for developing a risk assessment program. It provides information on program management including information regarding committee development, program administration, objectives, finance, and records management. Planning and design information was found in chapter five (5) of the standard. Common plan requirements, types of hazards to be assessed, and prevention and mitigation strategies are included within this chapter. Chapter six (6) deals with the implementation process of the program. It includes information for dealing with resource management, mutual aid, operations, response, incident management, emergency operations center (EOC), and training for the program. Once a program has been

designed and implemented, it must be tested and improvements made. This information can be found in chapters seven (7) and eight (8). It is recommended that the program be reviewed on a regularly scheduled time frame, and re-evaluated as changes within the jurisdiction occur.

The interview with Mr. Minor provided some of the same information located during the literature review. Mr. Minor explained the importance of identifying the potential risks for the area including man-made and natural risk. He also emphasized the need for identifying the exposures including schools, multi-family housing, manufacturing or industrial sites, and critical infrastructure. Another area of emphasis included the affects of the time of year or season had on the schools and major highways. Certain times of the year schools will either be filled with kids or vacated except for minimal staffing. The seasonal times will also affect the traffic flow and density of the major highways. Resources will need to be identified. These resources should include interdepartmental resources and outside agencies including mutual aid agreements with other like agencies as well as other types of organizations such as public works, law enforcement, medical sheltering, and medical transport. Mr. Minor also stressed the need for identifying the overall history of significant adverse weather events for the locale (G. Minor, personal communication, May, 2011).

Research question number three was answered by the interview with Mr. Marsh and question five on the internal questionnaire. The research question ask: what are the potential risks that could adversely affect the City of Ozark? The questionnaire and the Marsh interview indicated weather events and hazardous material events as the most significant risks for the City of Ozark (R. Marsh, personal communication, July, 2011). The majority indicated the significant weather events that could potentially impact the area included: tornados, straight line winds, and floods. This area of the country frequently has severe thunder storms which can potentially

produce damaging straight line winds. This area is also affected frequently by tornados. This region has been affected by hurricanes but we are far enough inland that the affects have typically included flooding, tornados, and damaging straight line winds. Other weather events indicated were droughts, and winter weather (snow & ice). This type of winter weather has not happened frequently, but when it has it caused many problems. Very few citizens of south Alabama have the necessary equipment and skills for driving on ice and snow. The City of Ozark has one major four lane highway (US 231). It is a major traffic way, but not a limited access highway. It has a history of very dense traffic and at one time, carried more traffic than Interstate 65. a major CSX railway runs through the City of Ozark and is a major freight connection. A hazardous materials incident involving US 231 or a railway could cause extensive damage, injury or loss of life.

Target hazards within the jurisdiction that should be addressed by the risk assessment included nursing homes, hospital, schools, water treatment facilities, critical infrastructure, retail locations, and industrial sites.

Research question four (4) asks: How will the City of Ozark and the Ozark Fire

Department benefit from a community risk assessment? Information derived from the internal questionnaire revealed several benefits. These benefits included safety of firefighters and citizens, resource management/allocation, improved tactics and strategies, and pre-planning for incidents. The opportunity to pre-plan allows for planning without the additional stress of dealing with the incident at the same time. An additional benefit discovered during the Marsh interview was that without a five (5) year hazard plan, jurisdictions will not be eligible for grants.

#### Discussion

The purpose of this applied research project was to discover the needed information, method and benefits of a community risk assessment. The descriptive research methodology was utilized to answer the research questions. The research and the review of published information have identified the needed tools to facilitate a community risk assessment in the City of Ozark.

HSPD-8 was issued to allow for a more comprehensive preparation for prevention, response, and recovery from major disasters (DHS, 2007). The time to plan and prepare is before the disaster occurs. Planning is the foundation for program management (Starling, 2005). Planning early leads to early preparation, which allows for resolve issues before they arise (Stambaugh & Sensenig, 2008). Most organizations have no problems when dealing with a common emergency incident; however that is not always the case when it is a disaster. Preparation is the key point in disaster preparation (Poulin, 2010).

All communities no matter the size or geographical location have the potential to be overwhelmed be a large scale event (Shouldis, 2010). It is the community and the organizations within that community that must make the appropriate plans in order to be prepared. The issues of community risk reduction must be addressed by both the fire service leadership as well as the political leadership of the community (Foley, n.d.). The fire service should take an active role in this preparation. The fire service will normally be a first response agency and often fills a vital role in that response (Poulin, 2010).

The process of performing a community risk assessment will not be an overnight task. It will take time and effort. The process will require a commitment from the entity leadership.

Without this commitment, the success of the program will be jeopardized. The entity must be

willing to provide needed policies and procedures, financial commitment, and resources to support the program. This program will be an ongoing process of review, evaluation, and correction. It is equally important for the entity to appoint a coordinator to oversee the development of the program and ensure that the program follows all applicable laws and regulations (NFPA, 2010).

NFPA 1600 suggest that by utilizing the "all hazards approach" organizations can be better prepared for all types of disasters (NFPA, 2010). Entities can draw from past experiences dealing with natural disasters or severe weather emergencies can assist them as they prepare for events that are not as common (Stambaugh & Sensenig, 2008)

#### Recommendations

This opportunity to attend the EAFSOEM class and the research for this applied research project produced much evidence supporting the need for a comprehensive community risk assessment and the potential issues that could arise from the failure to complete the assessment. The failure to perform the assessment, provide the needed support and resources, and maintain an effective plan through testing and updating can lead to disaster. It can have a negative effect on the safety of the entity's citizens, responders, and property.

This research produced a number of recommendations for implementing a community risk assessment program for the City of Ozark. These recommendations will not come without a cost, but the potential incidents should have a more positive outcome.

The evidence discovered through the research indicated that a community risk assessment is not just a need, it is a necessity. The approach to this program should follow the "all hazards" approach as indicated by NFPA. The entity leadership should utilize the NFPA 1600 as the framework to design the program to meet the needs of the City of Ozark. A committee of

stakeholders should be formed with a dedicated and qualfied coordinator. All applicable policies and procedures should be agreed upon and in place prior to any events. Hazards should be identified and evaluated for potential risk. At risk citizens, property, and infrastructure must be identified as well. Outside resources must be identified and all mutual aid agreements with outside agencies must be procured.

In conclusion, there is much information available concerning community risk assessment and the need is evident. Completion of this program will take time, effort, and financial support. A failure to address any of these vital aspects will lead to a sub-par product. Diligence and attention to detail is vital to the success of this program.

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# Appendix A: Ozark Fire Department Officer Questionnaire

- 1. How would you rate the significance or value of a risk assessment if working at a large scale incident?
  - a. Little value
  - b. Significant value
  - c. Extremely valuable
- 2. Can you recall and describe an incident (or incidents) where you would have utilized a risk assessment if it had been available?
- 3. How would a risk assessment be of value to you as a company officer at the Ozark Fire Department?
- 4. Why has there been no effort to complete a risk assessment in the past?
- 5. Which of the following events would you consider as significant risks to this city? Please mark your top three.
  - a. Terrorist events
  - b. Droughts
  - c. Hazardous material incident
  - d. Floods
  - e. Snow and ice
  - f. Pandemic events (flu)
  - g. Wind
  - h. Hurricanes
  - i. Tornados
- 6. What would classify as the top five (5) target hazards in the city?

- 7. At the current status of the department, how well prepared would we be to respond to a significant event in the city?

  a. Not prepared
  b. Not as well as we should be
  c. Well prepared

  8. What type obstacles would you anticipate encountering if performing a risk assessment?
  9. How would you define a target hazard?
  10. What type criteria should the Ozark Fire Department employ to identify target hazards?
- 11. What type of information should be identified and collected from the target hazards

# Appendix B: Ozark Fire Department Officer Questionnaire Results

- 12. How would you rate the significance or value of a risk assessment if working at a large scale incident?
  - a. Little value-0
  - b. Significant value-0
  - c. Extremely valuable-0
- 13. Can you recall and describe an incident (or incidents) where you would have utilized a risk assessment if it had been available?

Multiple answers

14. How would a risk assessment be of value to you as a company officer at the Ozark Fire Department?

Resource management

Shelter availability

Tactics & strategies

Target hazards

15. Why has there been no effort to complete a risk assessment in the past? Lack of belief in the significance and value

- 16. Which of the following events would you consider as significant risks to this city? Please mark your top three.
  - a. Terrorist events
  - b. Droughts-2
  - c. Hazardous material incident 8
  - d. Floods 4
  - e. Snow and ice 1
  - f. Pandemic events (flu) -1 (some marked more than 3)
  - g. Wind-6
  - h. Hurricanes- 1
  - i. Tornados 6
- 17. What would classify as the top five (5) target hazards in the city?

1. Healthcare facilities

5. Nursing homes/assisted living

2. Industrial sites

6. Schools

3. Critical infrastructure

7. Shopping centers

4. Highway/railway

8. Critical business locations

- 18. At the current status of the department, how well prepared would we be to respond to a significant event in the city?
  - a. Not prepared -3
  - b. Not as well as we should be -5
  - c. Well prepared
- 19. What type obstacles would you anticipate encountering if performing a risk assessment? Finances, time, resources
- 20. How would you define a target hazard? Multiple answers
- 21. What type criteria should the Ozark Fire Department employ to identify target hazards? Life safety
  Critical infrastructure
  Unique hazards
- 22. What type of information should be identified and collected from the target hazards Special needs, type of occupancy, average number of occupants, evacuation plans